

SECTION 6. SECURITY

The joint TM system must have the capability to handle classified material and must ensure compatibility with National Security Agency (NSA)/Department of Defense (DoD) classified data handling restrictions. The security for the system will be governed by information contained in Department of Defense Directives, DoD STD 5200.28, DoD 52000. 1-R, NCSC 1, NCSC-TG-005, NTISSP 300, applicable services directives, and local directives. It will provide automated security functions and mechanisms that will enforce DoD, service, and local security policy. Security functions and mechanisms must meet DoD assurance requirements for processing classified information.

#### 6.1 Background Information.

The automated data system (ADS) must accommodate the management of all technical manual (TM) data, both classified and unclassified. The system is required to manage, process, and handle digital and paper TMs up to and including the classification of SECRET. Classified and unclassified TMs may contain several categories of need to know authorization.

The ADS implementation must process and transfer technical publications management data and textual data within and among ADS sites. It is anticipated that the aggregation of the unclassified TM data within the data base will result in a sensitivity rating of ADP-1 CRITICAL SENSITIVE. The ADS resources upon which the data resides is rated ADP-1 HIGHLY CRITICAL

There are various processing options available that could adequately satisfy ADS classified processing requirements and enforce system security policy. Several options have been considered ranging from a totally classified system at all locations, to a system that may handle classified within specific locations, to a classified system that is totally separate from a system that handles unclassified information. The final solution, however, is not limited to these options. The method selected must manage classified information in an effective and economical manner, meet the system requirements, and enforce the system security policies.

#### 6.2 Control Points, Vulnerabilities, and Safeguards.

The system must be a secure system that controls, through the use of specific automated security features, access to information such that only properly authorized individuals retrieve, read, modify or delete. Those fundamental security requirements, outlined in DOD 5200.28 include: policy, access control, identification/authorization, audit, evaluation/review, automated

security features and mechanisms, and tampering/change protection.

6.2.1 Control Points.

As information is passed from one control point to another through communication links, whatever the mode of transmission, the ADS must ensure the integrity of the information is maintained and that the sensitivity or classification of the information passed is protected in accordance with accepted policy and procedures.

ADS control points will be established, in keeping with DoD and each service's computer and communications security policies and procedures, throughout the ADS components and associated telecommunications links. As information is accessed or passed from one point to another, the ADS must:

- a. Ensure the integrity of the data is maintained at 100 percent.
- b. Ensure that the data is accessed only by authorized users.
- c. Ensure that appropriately secure, telecommunications paths and encryption methods are employed.
- d. Ensure adequate and verifiable separation of classified and unclassified data bases is maintained at all nodes in the network.
- e. Ensure complete adherence to all applicable DoD and Service requirements for implementation of Computer Security (COMPUSEC), Communications Security (COMSEC), Operations Security (OPSEC), Emanations Security/TEMPEST, and Physical Security.

6.2.2 Vulnerabilities.

Vulnerabilities in a computer system are weaknesses in the system's security procedures, administrative or internal controls that could be exploited to gain unauthorized access to information or disrupt critical processing. Because of the sensitivity and classification of information within the system, vulnerabilities must be minimized and safeguards provided to preclude loss of data, processing errors, compromise of information, and susceptibility to exploitation. All locations share these vulnerabilities because data may be input, output, edited, processed, and reported at all of them. System interfaces also introduce vulnerabilities in that data may enter or leave the system, become corrupted or compromised. Vulnerabilities include both human and environmental. Human vulnerabilities may be introduced intentionally or unintentionally. The system must be capable of minimizing this

risk. Environmental vulnerabilities must be minimized through design, application of technology solutions, and the implementation of facility and physical security programs and procedures.

### 6.2.3 Safeguards.

#### 6.2.3.1 Policy and Access Control.

A set of rules must be established by the ADS to determine whether a given user can access specific data. A mandatory security policy will be identified to effectively implement access rules for handling sensitive (e.g. both classified and unclassified) data and will be enforced by software. Access control must be linked to data. In order to control access to information stored in the data base, all data will be labeled to reliably identify the sensitivity level of that data and/or the modes of access accorded those users attempting to access the data.

#### 6.2.3.2 Identification/Authorization.

Individual users must be identified. Each attempt to access information must be controlled based on who is accessing the information and what classes of information they are authorized access. This identification and authorization information must be securely maintained by the ADS and be associated with every active process that performs some security-relevant function in the system.

#### 6.2.3.3 Information/Data Security.

##### 6.2.3.3.1 General Policy.<F255P255D>

The ADS must be capable of handling and safeguarding classified and unclassified data. TEMPEST, encryption, COMPUSEC and COMSEC considerations will be incorporated. Safeguards appropriate for the security level of the data will be implemented as prescribed by DoD and DoD directives and regulations.

##### 6.2.3.3.2 Facility Security.

Facility security requirements will be fully developed by the Government in the Security Support Plan. The system must take necessary measures to ensure external protection for the ADS against unauthorized access to computer facilities, to system remote terminals, and to the data storage media. The minimum protection requirements for the highest classification of information involved will be met as prescribed by applicable DoD and service directives and regulations.

6.2.3.4 Physical Security.

Physical security includes:

- a. Physical access control and barriers at the place where the systems and/or data reside;
- b. Stringent controls over personnel permitted in those areas and personnel traffic through those areas;
- c. Stringent controls over modification of system software, application software or hardware elements;
- d. Stringent administrative controls over data storage media and output products within the system; and
- e. COMSEC, COMPUSEC and TEMPEST.

Physical security measures will be implemented by the Government.

6.3 System Monitoring and Auditing.

The ADS must contain mechanisms that can be independently evaluated to assure user access is strictly controlled. The basis for trusting such system mechanisms in their operations setting must be clearly documented. Audit information must be internally and selectively recorded so actions affecting security can be traced to the responsible party. The capability to select and review recorded audit events is necessary to minimize the expense of auditing and to allow efficient analysis. Audit data must be protected from modification and unauthorized destruction to permit detection.

# **APPENDIX I**

**Joint Uniform Service  
Technical Information System  
Glossary**

GLOSSARY

Account Reconciliation Data

TRI-SERVICE

Account Reconciliation Data is developed during periodic reviews of TMs on hand with authorized levels and the TM reconciliation data provided by the TM managers and account custodians. This data will contain information used to determine the need for a TM as well as validate actions to rescind a TM.

Amended Reproduction Request

TRI-SERVICE

Amended Reproduction Requests change the quantity of the requested TM or change the shipping instructions.

ARMY

The Amended Reproduction Request can change up to twenty-five percent of the originally requested quantity.

Authorization Documents

TRI-SERVICE

Authorization Documents [e.g., the contract providing goods and services, approved/accepted plans and reports, letters, obligation authority, military inter-departmental purchase request (MIPR), memoranda of agreement (MOA)] identify the services, procedures and products to be provided by supporting activities (contractor or government).

Automated Data Processing Support

TRI-SERVICE

Communications-computer hardware, software, documentation and training materials required to support the TM program.

Automatic Distribution Request

TRI-SERVICE

Identifies TMs to be automatically distributed to an organization.

ARMY

Automatic Distribution Requests are submitted using DA 12-Series forms.

AIR FORCE

Automatic Distribution Requests are submitted using an AFRO Form 187, Technical Order Publication Request (prescribing directive TO 00-5-2). Technical Order Distribution Offices (TODOS) submit their requirements and requisition data to the centralized system by Automated Digital Information Network (AUTODIN) or AFTO Form 187.

Budget

TRI-SERVICE

Funds required to provide the resources, such as personnel, travel, Automated Data System (ADS) support and equipment, required by the organization to perform its functions.

Comments on Documentation for TM Acquisition Planning

TRI-SERVICE

TM Acquisition Planning Documentation is reviewed, and appropriate comments and updates are made for inclusion in the documents.

ARMY

Comments gathered from various authorities concerning the legality and/or compliance with policies, guidance, etc. of an acquisition planning document.

Consolidated Publication Schedule

TRI-SERVICE

Consolidated Publication Schedule contains summary information on the developing, publishing, and release of all IMs.

ARMY

Army aggregate of the information from:

AMC Form 1217-R (Approved) - An AMC Form 1217-R is approved when Materiel Readiness Support Activity (MRSA) validates the development of the subject TM.

## **Appendix I**

**19 December 1991**

Consolidated Schedule - PCN# W53BHRO924R (For Review) - A consolidated schedule developed periodically by MRSA from inputs provided by the Major Subordinate Commands (MSCS) on completed AMC Form 1217, "Schedule for Preparation of Equipment Publications". MRSA provides the schedule to the MSCs foT review and update.

### Contractor Personnel

#### TRI-SERVICE

Personnel employed by an organization contracted by the government to support or perform a function.

### Deficient/Excess Requirement

#### TRI-SERVICE

The difference between the number of copies of a TM on hand and on order and the number required.

#### ARMY

The number of TMs required is requested via DA 4569 or authorized via DA 12-series forms. These conditions can surface upon receipt of TMs but are usually identified during redistribution to users.

### Distribution Control Record

#### TRI-SERVICE

Historical record of TM information concerning requisitions, requirements, dates received, dates forwarded to sub-accounts, etc.

### Distribution Materials

#### TRI-SERVICE

Distribution Materials are those products developed to control and distribute all classified and unclassified TMs. They are developed by the government for use by government and contractor organizations in distribution of TMs.

#### ARMY

These include shipping labels (USAPDC-B-LABEL 2 for unclassified publications, and Document Receipt and Destruction Notices (DA Form 3964) for classified TMs.



**AIR FORCE**

Distribution Materials, prescribed in TO 00-5-2, Section VII, include the following:

1. AFTO Form 273: Initial Distribution Label (Unclassified TOs) TO/CPIN
2. AFTO Form 274: Initial Distribution Label (Classified TOs) AFRO Form 274 H) LABEL.
3. AFTO Form 276: Special Requisition for Air Force TO/CPIN.
4. AFTO Form 221: ADP - AFRO Form 221, ADP Requisition for Air Force TO/CPIN.
5. AF Form 310: Document Receipt and Destruction Notice.
6. Cover Letter: A letter that is sent with TOs that have been ordered by a member of the general public to inform them that the material cannot be exported unless appropriate licenses are obtained. Export of certain technical data must be licensed under the International Traffic in Arms Regulation. Any property released must either be marked with appropriate restrictions or accompanied by letters indicating that the material cannot be exported unless appropriate licenses are obtained.
7. AFLC Form 578, USAF Technical Order Initial Distribution Verification: This form is completed and signed by the printer after they have made initial distribution and sent the back-up stock to the warehouse. The printer is certifying that he has completed distribution. This form is used in the acquisition area only, as ID is made by Air Force Information Management personnel for formalized TOs.
8. ID Label Listing: This product provides the Technical Order Distribution Control Activity (TODCA) with a record of users address codes and quantities being shipped on ID.
9. Label Count Summary: The product provides the TODCA with a total number of packages to be mailed.
10. SAP ID Delivery Control Record: When ID is to be accomplished on a TO for which one or more foreign countries are also on ID, the Security Assistance Program (SAP) ID Delivery Control Record is generated by the computer and forwarded with mailing labels, ID Label List and Label Count Summary to the TODCA in original and one copy.

Upon completion of ID of the TO, the TODCA fills out the

appropriate blocks and makes necessary data inputs.

1. The AFTO 110 is used to document distribution to subaccounts.

#### Distribution Record Updates

##### TRI-SERVICE

The result of management reviews are updates to distribution records which record ordering, receipt, and other TM account information.

##### ARMY

Distribution Record Updates are contained on publications stock control cards (DA Form 479/479-1 or equivalent) currently maintained by the Publication Control Officer. As the inventory changes, updates are made to the management records (AR 25-30).

##### NAVY

Distribution Record Updates include a Classified TM certification, Master Address File Updates [Naval Publications and Forms Center (NPFC)], Activity Address Code File [Naval Air Technical Services Facility (NATSF)] updates, and E-STEPS Distribution Sub-system maintenance. Requisition History File and PC-based Initial Outfitting/Distribution files (NPFC), Activity Requirements List, TM Indexes, Catalog Change Notice, Letter/Message, Disposal Order, ROD (Customer), Forms and Publication Status Report (FTSR), Sponsor Authorization for Issue, Publication Distribution Request (PDR) File Maintenance.

##### AIR FORCE

The management record for TO system use which ensures standardization of records and procedures is the TO/CPIN Distribution Record (i.e., AFTO Form 110). The local record is annotated for each action that affects the TO files, e.g., ordering/receiving/filing/redistributing TOs.

#### Distribution Verification (Publisher)

##### TRI-SERVICE

Verification that distribution has been completed is made by the printer.

ARMY

Verification that the printing contractor has accomplished the distribution comes when the document is received at MRSA.

AIR FORCE

The printer completes an AFLC Form 578 (Technical Order Initial Distribution Verification). The form contains the TO Number, TO Date, Type (new, change, revision, or supplement), Date Initial Distribution (ID) Completed, Quantity ID Shipped, Number of Labels, Air Force Contract Number, Administrative Contract Officer (ACO), Date Back-up Stock Shipped, Quantity, Method of Shipment, Government Bill of Lading, Carrier and the Signature and Address of the printer.

Department of Defense (DoD) Personnel

TRI-SERVICE

All military and civil service personnel supporting the DoD.

DoD Policy and Guidance

TRI-SERVICE

DoD policy and guidance are derived directly from Public Law, policies and procedures established in the Executive Branch of the Federal Government. For TM program management, guidance is contained in DoD Instruction 4151.9 which applies to all service components.

AIR FORCE

The Air Force manages the TO system to comply with DoD directives, instructions, specifications and standards. DoD Instruction 4151.9 applies to all Air Force activities including the Air Force Reserve and Air National Guard. All Air Force Policy and Guidance is developed within the parameters set by DoD Policy and Guidance.

Filed TM

TRI-SERVICE

A Filed TM is a TM in an authorized file of one or more TMs maintained for continuing use and therefore requiring distribution and inclusion of all changes, revisions, and applicable supplements. Authorized TM files are established to provide personnel at all echelons quick access to the TMs required for the most efficient and effective performance of assigned duties.

## **Appendix I**

**19 December 1991**

Interim TM (ITM)

TRI-SERVICE

Interim TMs are prepared as a response to emergency/urgent situations or when quick publication and distribution are required.

ARMY

Interim TMs also include modification work orders (MWO) and safety of flight instructions.

AIR FORCE

Interim TMs include time compliance technical manuals/supplements, operational supplements, safety supplements, and field change notices.

Material Inspection & Receiving Report (DD Form 250)

TRI-SERVICE

The Material Inspection & Receiving Report is used to acknowledge receipt of TMs from a commercial reproduction facility, and to acknowledge receipt of reproducible masters from contractors.

Meeting/Conference/Schedule Requirements

TRI-SERVICE

Meeting/Conference/Schedule Requirements are formal and informal meetings, including guidance conferences, which are identified and communicated to all agencies (government and contractor) participating in the acquisition of technical data. These meetings clarify requirements, identify problems, review progress and provide/obtain direction in the preparation of equipment technical publication.

Perceived Deficiency

TRI-SERVICE

Perceived Deficiency is a problem encountered in a TM by a user.

Preliminary/Draft TM

TRI-SERVICE

Preliminary/Draft TMs are unverified or partially verified TMs

reproduced in limited quantities for government personnel. They are used to test and verify the procedures for maintenance and operation of early production models of equipment and for initial training purposes.

ARMY

Draft TMs are also sent to users for review during revision and used to support the verification process.

Preliminary/Draft/Formal TM

TRI-SERVICE

Any TM released for use. A preliminary or draft TM may be used in an operational environment only if a waiver has been specifically granted.

ARMY

The Army also includes Advance TMs which are those released by a TM proponent for Army use as fully verified and validated while the coordination necessary for formal authentication is being conducted and reproduction facilities create sufficient quantities for full distribution. Advance TMs are released in limited numbers to provide timely support for a fielded system.

Print Requirement

TRI-SERVICE

Print Requirement is the establishment of stock level requirements based on initial distribution requirements, plus the backup stock requirements.

ARMY

The Army Print Requirement also includes fielding and service schools requirements.

Program Support

TRI-SERVICE

Program Support requirements are those services required by the TM program. These include manning, budgeting (funds level report), and ADP support requirements.

Public Law

TRI-SERVICE

Three principle elements of Public Law influencing the TM program are:

1. United States Code, Title 44, which establishes the Government Printing Office (GPO) as the primary source of printed publications and defines DoD component requirements for obtaining and using printed materials.

2. Freedom of Information Act (FOIA), which prescribes rules for the public to obtain government documents, including equipment technical publications which are not otherwise restricted from public dissemination.

3. Title 10, U.S. Code 130, Authority to Withhold from Public Disclosure Certain Technical Data. This public law permits the withholding from public disclosure any technical data with military or space application in the possession of, or under the control of the DoD, if such data may not be exported lawfully outside the U.S. without an approved authorization or license.

Publication Change Package

TRI-SERVICE

The collection of approved recommended changes, technical analyses, source data and other materials provided to a contractor or organic source to make changes to a TM.

ARMY

Publications Change Packages (PCPs) may contain approved changes that have been aggregated for a number of change recommendation actions. The identification number of the change is assigned by the proponent MSC at the time the package is assembled. Publication Number(s)

TRI-SERVICE

Unique numbers to categorize data of technical systems and equipment which provide sequence for filing, and furnished as a means for users to identify and establish requirements for distribution.

## NAVY

The Navy also assigns a Stock Number to a Publication in addition to the TM Number. The Stock Number and TM Number may on occasion be used interchangeably to refer to a TM. The TM stock number mirrors the size and structure of the National Stock Number (NSN). It is required in order to take advantage of DoD standardized requisitioning and inventory control transaction systems (i.e., MILSTRIP/MILSTRAP).

## Publication Numbering Request

## TRI-SERVICE

The Publication Numbering Request is used to request assignment of TM numbers, to submit TM Index source data, to set up an ADP record, and to update, change, rescind, or cancel these records when appropriate.

## ARMY

TM numbers are requested by the appropriate MSC, usually by telephone, and assigned by MRSA in blocks. The MSCs assign numbers individually using local operating procedures and instructions. The DA Form 1217-R is used to formalize specific TM number assignments and communicate those assignments between the MSCs and MRSA.

## Publication Schedule Information

## TRI-SERVICE

Information on the developing, publishing, and release of a TM used to update or as input to the Consolidated Publication Schedule.

## ARMY

Publication Schedule Information for the Army includes:

AMC Form 1217-R - "Schedule for Preparation of Equipment Publications", is prepared by the MSC to alert AMC MRSA that a new or revised TM is scheduled for completion. MRSA uses the information to update the Equipment Oriented Publication Data Base (EOPDB). U.S. Army Publications and Printing Command (USAPPC) uses the EOPDB-based schedule information to validate which publication can be reproduced.

Consolidated Schedule - PCN# W53BHRO924R (Reviewed) - The MSCs return the consolidated schedule to MRSA who then updates the master schedules. MRSA also sends the information to USAPPC who uses it to establish block numbers for inclusion in DA 12-series forms used to requisition and distribute the publications. DA Form 260/Local Print Request - Used to communicate the initiation of the reproduction cycle for a given TM.

#### Receipt Record

##### TRI-SERVICE

The Receipt Record records the receipt of the TM and identifies any discrepancies in the shipment.

#### Recommended Change

##### TRI-SERVICE

A change proposed to rectify a perceived deficiency.

##### ARMY

DA Forms 2028 and 2028-2, Engineering Change Proposals (ECPs), Equipment Improvement Reports (EIRs), and correspondence may be used to identify and document a recommended change. Originators of recommended changes submit them directly to the proponent MSC.

##### AIR FORCE

AFTO Forms 22, 27, 158, AFLC Form 103, or Air Force Form 847 may be used to identify and document the recommended change. Recommended changes go through various quality control channels before they are forwarded to the appropriate change authority.

#### Recommended Change (Admin Review)

##### TRI-SERVICE

Administratively reviewed recommended changes which have been reviewed for proper signature levels entries and routing indicators, and logged into the tracking system.

##### ARMY

A notice is also generated to alert the appropriate MSC office or action officer that the recommended change has been received, is entered in the tracking system, and that a control number has been assigned.



Recommended Change (Status Feedback)

TRI-SERVICE

The recommended change is returned to the initiator and any reviewing activities reflecting approval, deferment, advisement, or disapproval.

ARMY

Any kind of feedback on a recommended change. Includes:

Receipt Acknowledgment - A card, letter, or form sent from the proponent MSC to the initiator upon receipt of a recommended change. A DA Form 209, "Delay, Referral, Follow-up Notice", may be used for this purpose.

Status Report - Appraises the initiator of the status of his/her recommended change. This feedback can consist of a memo, letter, etc.

Reproducible Master (Existing)

TRI-SERVICE

Existing master copies of printed material, negatives, artwork, or digital media being maintained organically or by a contractor from which copies are obtained.

Reproducible Master (from Publishing Facility)

TRI-SERVICE

Reproducible masters are returned by the publisher to the originating government agency.

Reproducible Master (New)

TRI-SERVICE

Reproducible Master (New) is reproducible material that has been generated either organically or by contractor as a result of a publication change package or preliminary/formal TM received at a responsible government agency.

ARMY

A Material Inspection & Receiving Report accompanies Reproducible Masters (New) when they have been prepared by a contractor.

Reproducible Master Tracer Action

TRI-SERVICE

Action initiated to locate a reproducible master previously sent to a reproduction facility.

Reproduction Package

TRI-SERVICE

A Reproduction Package consists of all documentation needed to reproduce a TM, a change, or revision.

ARMY

A DA Reproduction Package can include a Request for Printing (DA Form 260), reproducible masters, shipping/distribution instructions as provided on DAAG Form 314, distribution labels, and other documents. A command Reproduction Package includes a local print request instead of a DA Form 260 and will not include shipping/distribution instructions.

AIR FORCE

The Reproduction Package consists of the reproducible material (negatives, artwork, print masters etc.), the AFLC Form 254 (Reproduction Assembly Sheets), the DD Form 843 (Requisition for Printing and Binding Services), and distribution materials if necessary. Request for Proposal (RFP) Input

TRI-SERVICE

The TM contract requirements identified in the acquisition planning process.

Request for Reproducible Master

TRI-SERVICE

Identifies the need for a reproducible master by an organization.

Request for Reproducible Master Return

TRI-SERVICE

Request for the return of an overdue reproducible master.

Request for Rescinded/Active TM

## **Appendix I**

**19 December 1991**

### **TRI-SERVICE**

A documented need for a rescinded or active TM which is sent to the organization responsible for the TM.

### **ARMY**

Requests for Rescinded TMs can be received through several channels, such as FOIA, publication channels (DA Form 4569), or correspondence sent directly to the responsible MSC. Normally, USAPPC notifies requesters of rescinded publications that the requested publication is obsolete. Follow-up requests are evaluated for adequate justification and, if approved, a copy will be reproduced from available MSC reference file copies and sent to the requester.

### **NAVY**

In addition, the Navy requests may be for a TM that has been canceled or superseded.

### **Request to Rescind TM**

### **TRI-SERVICE**

Request to rescind a currently active TM because it is no longer used.

### **ARMY**

A formal request to rescind a TM (AMC Form 2246-R) because it is no longer to be used in the active Army, National Guard, Army Reserve and/or SAP Program. An Army TM can be rescinded for active Army use but still be used by National Guard, Army Reserve and/or SAP program.

### **NAVY**

Notification via FPSR (NAVSUP 1088) from TM sponsor to NPFC to rescind TM or cancel/change a stock number.

### **Rescinded TM Review List**

### **TRI-SERVICE**

List generated which identifies TMs which have been rescinded or are candidates for rescission.

ARMY

A list sent by MRSA to the MSCs via a transmittal letter to identify publications that are candidates for rescission.

AIR FORCE

A review list of rescinded TOs is provided to the Air Logistics Center (ALC) TO managers and identifies TOs rescinded six years or more (AFLCR 8-5, Section 1).

Rescinded TM Review List (Reply)

TRI-SERVICE

The Rescinded TM Review list with annotated comments.

ARMY

This reply contains MSC responses to all items in the review list. If the MSCs have identified a publication as no longer needed for active Army use, an AMC 2246-R accompanies the reply for each affected publication. Justification is provided in the reply for each publication the MSC wishes to retain.

Rescinded/Active TM

TRI-SERVICE

A TM pulled from a repository to support a request.

ARMY

Includes both active TMs and TMs which are no longer used in the Army, Army Reserve, and Army National Guard, and are indicated in the appropriate index as rescinded for whatever component no longer uses the manuals. Stocks of rescinded TMs may be retained in MSC Publications Reference Files as required, such as supporting the SAP.

Shipped TM

TRI-SERVICE

TMs distributed from the publishing facility or from government warehouses to military activities, other government agencies, contractors, SAP countries, and to the general public as a result of established requirements.

ARMY

Shipped TMs also include MSC authenticated publications, such as MWOs and Depot Maintenance Work Requirements (DMWRs), that are shipped by the proponent MSC.

Stock Status Update

TRI-SERVICE

A notification to the appropriate manager of the change in the stock level at the storage facility.

ARMY

When this notification signifies the receipt of a shipment, USAPPC then closes out the print order in the Case Management System.

AIR FORCE

The Stock Status Update is the notification to the TO Manager, by warehouse personnel, of new stock received from the reproduction facility (AFLC Form 531, TO Receiving and Processing Record).

Tasking Documents

TRI-SERVICE

Documents which drive requirements for TM acquisition.

ARMY

Army Tasking Documents also include Operation and Organization (O&O) Plans, Required Operational Capability (ROC), and Mission Need Statements (MNS).

Technical Analysis Results

TRI-SERVICE

Technical Analysis Results address problems identified in recommended changes to TMs and evaluate the feasibility of recommended changes.

ARMY

The result is documented via a memorandum to the change initiator.

NAVY

Technical Analysis Results for the Navy include:

1. Price Proposals received from contractors indicating the number of pages to be changed and the cost of the changes.

2. Source Data Package (SDP), additions to existing SDPS, or update package (design folder) created from the Master Data Package containing a marked up (red-lined) version of the TM. Several Source Data Packages may be made over the lifetime of the TM.

AIR FORCE

Technical Analysis results include the technically evaluated and completed TO recommended changes (AFTO Forms 22, 27, 158 and Air Force Form 847) with its results (approved, disapproved, test, or advisement); the resultant Publication Change Request (PCR) (AFLC Form 252) if required, and/or an interim TO.

Technical Manual

TRI-SERVICE

Publications that contain instructions for the installation, operation, maintenance, training, and support of weapon systems, weapon system components, and support equipment. TM information may be presented in any form or characteristic, including but not limited to hard printed copy, audio and visual displays, magnetic tape, discs, and other electronic devices. They normally include operational and maintenance instructions, parts lists or parts breakdown, and related technical information or procedures exclusive of administrative procedures. TOs that meet the criteria of this definition may also be classified as TMs.

ARMY

Army TMs deal with the installation, operation, maintenance, training, and parts support of Army equipment. TMs include TM [such as Repair Parts and Special Tools List (RPSTL), Initial Mandatory Parts Lists (IMPL), and Battle Damage Assessment and Repair (BDAR) Manuals], Technical Bulletins (TB), Lubrication Orders (LO), Supply Manuals (SM), Supply Bulletins (SBs), Supply Catalogs (SC), Modification Work Orders (MWO), and Depot Maintenance Work Requirements (DMWR).

**NAVY**

Navy TMs are grouped in a variety of categories based on the type of equipment used and the peculiarities of the operational/maintenance requirement. Included in this definition are Technical Publications, Technical Directives, Ships Manuals of all types, Instruction and Repair Manuals for all types of equipment, Stock Lists, Indexes, Procedures Manuals, Rate Training Manuals, and Personnel Qualification Standards.

**AIR FORCE**

Air Force TMs are grouped into five types: TOs, Methods and Procedures Technical Orders (MPTOs), Index Type Technical Orders (ITTOs), Time Compliance Technical Order (TCTOs), and Abbreviated Technical Orders (ATOs).

**TM Account****TRI-SERVICE**

A TM Account identifies an organization-level address for users of TMs.

**ARMY**

USAPPC assigns a unique publication account code (6 digits, alpha numeric) to identify each TM account (DA Pamphlet 25-33) and enable them to order TMs.

**NAVY**

The Navy distributes requirements keyed to unit identification codes (UIC), activity codes, standard Navy distribution lists, and automatic distribution tables.

**AIR FORCE**

A TODO Code, a four digit number, is assigned to an organization to establish the TODO Account and enable them to order TOs. Account custodians below a TODO maintain TM libraries. These custodians are known as TODA or TODS in the Air Force TO system.

**TM Account Assignment/Change Request****TRI-SERVICE**

Identifies a request to assign or change an organizational-level address for a user of TMs.

ARMY

A Publication Account Code Assignment/Change Request (DA Form 12R) is used to request or change an account code.

AIR FORCE

Request for TODO codes or changes to them (AFTO Form 43, Request for USAF TODO).

TM Account Need

TRI-SERVICE

The requirement by an organization to establish a TM address for the automatic distribution and authorized receipt of TMs.

TM Acquisition Planning Documents

TRI-SERVICE

TM Acquisition Planning Documents [e.g., Contract Data Requirements List (CDRLs), verification plans, Statements of Work (SOWs), Price Proposals] are used to plan and specify requirements for development, review, coordination, production, verification, and validation of TMs. TM Acquisition Planning Documents may be included as RFP Inputs.

TM Acquisition Reference Documents

TRI-SERVICE

TM Acquisition Reference Documents are used to create TM Acquisition Planning Documents. The reference documentation used in TM acquisition include, but are not limited to:

1. Department of Defense Index of Specifications and Standards (DoDISS).
2. DOD-STD 1790, Data Requirements for Development, Acquisition, and Update of TMs.
3. Acquisition Management System and Data Requirements Control List.
4. Existing Technical Manual contract requirements (TMCR) documents.
5. Existing SOWs.



6. Existing Technical Manual Verification Plans (TMVPs).
7. Existing Management Plans.
8. Existing Validation Plans.
9. Existing Maintenance Plans.
10. Data Item Descriptions (DIDs).
11. Existing Test and Evaluation Master Plans.
12. Integrated Logistics Support Plans (ILSP).
13. Interservice Support Requirements Documents.
14. Technical Manual Specifications and Standards (TMSS).
15. Existing Acquisition Plans.

ARMY

Typical TM Acquisition Reference Documents also include:  
Target Audience Descriptions.

NAVY

The Navy documents also include:  
Navy or occupational standards.

TM Customer Return

TRI-SERVICE

When a distributed TM is damaged, flawed, or in excess quantity, the customer will return the TM to the distribution center or repository and the respective TM account will be credited.

TM Development Feedback

TRI-SERVICE

TM Development Feedback are comments, guidance, and other directions given to the organization (contractor or government) developing the TMs.

This provides approvals/disapprovals and comments on development planning documentation and TMs in various stages of development including verification status and verification certification.

TM Development Plans and Reports

TRI-SERVICE

TM Development Plans, Reports, and updates (e.g., validation plan, TM publication plan, validation certification) are developed by contractors (or government developer) to identify their development efforts, plans, and procedures and to repose schedule, status, and findings.

ARMY

TM Development Plans and Reports also include conference/meeting action items and minutes.

TM Distribution Requirement

TRI-SERVICE

The TM Distribution Requirement is the sum of all the requests for a particular TM, including automatic distribution and non- recurring requisitions.

ARMY

TM distribution requirements include automatic distribution requirements processed using the USAPPC ID Requirements File and one-time requests processed using the USAPPC Computerized Inventory Management System (CIMS) files.

TM Improvement System Status Reports

TRI-SERVICE

TM Improvement System Status Reports are status and information summary reports on TM recommended changes. They are provided for file maintenance record keeping and reporting to interested organizations.

TM Index

TRI-SERVICE

The TM Index reflects the latest information on the TMs listed (i.e., date of latest version of the TM, latest change, etc.).

ARMY

Data listed includes revision date, all current changes by number and date, NSN correlation to the TM, etc. USAPPC publishes the master Army TM index as DA Pamphlet 25-30.

NAVY

Some of the Navy TM indexes produced may include:

1. NTSC 1480 - Index of Publications.
2. NPFC Pub 2002 - Abridged and Unabridged Navy Index of Publications and Forms.
3. NAVAIR 500 Series Publications.
4. E-STEPS Publication Data Subsystem Indexes.
5. TM and Cognizant Field Activity Cross-reference.
6. Index of Repository Contents.
7. NAVEDTRA 12061 - List of Training Manuals and Non-Resident Training Courses.

TM Need

TRI-SERVICE

A requirement for a TM needed to accomplish assigned duties.

TM One-Time Need

TRI-SERVICE

A TM Need which requires neither creation/changes to a TM Account nor automatic distribution of TM changes and revisions.

TM Policy and Guidance

TRI-SERVICE

TM policy and guidance consists of military regulations, directives, messages, letters, the TMSS, and the specific guidance and implementing instructions issued by the responsible command organization.

TM Policy Requirements

TRI-SERVICE

Identifies requirements for new or improved TM policy documents for the management of the TM system.

TM Program Management Requirements

TRI-SERVICE

Requirements for policy and guidance, system support, or changes to them.

NAVY

Includes Navy TM Management Policy Council guidance and Computer-aided Acquisition and Logistics System (CALs) policy guidance and change request for instructions and guidance.  
TM Program Resources

TRI-SERVICE

TM Program resources include personnel, funding, and facilities applied to the TM program.

TM Reconciliation Data

TRI-SERVICE

Lists generated to aid in verifying that the TM Account information is current and that all required TMs are on hand or on order to meet TM Account requirements.

ARMY

The TM ID Requirements Data reconciliation listings contain information about TM publication accounts, including TM numbers, authorized security classification, initial distribution quantity, and date of requirement for a TM publication account. Back-order quantities and number/status of requests older than six months can be requested from USAPPC who extracts the information from the Customer Requisitioning Accounting Module (CRAM) System.

AIR FORCE

The Air Force Code Selected Reconciliation List (CSRL) contains TO number, security classification, ID quantity, quantity back-ordered, date of requirement, request number and TO status for a specific TODO. CSRLs are generated on a cyclic basis and sent to each TODO yearly.

## **Appendix I**

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The TODOs verify the CSRL with the TO/CPIN Distribution Record Update to ensure that all required TOs are on hand or on order in sufficient quantities to meet account requirements.

TM Request (Non-Recurring)

TRI-SERVICE

A TM Request (Non-Recurring) is a documented need for a one-time requisition of a TM.

ARMY

In addition, TM Requests (Non-Recurring) are submitted using DA Form 4569 and processed through CIMS.

AIR FORCE

TM Requests (Non-Recurring) for the Air Force are submitted via:

1. AFTO Form 187, Technical Order Publication Request (prescribing directive TO 00-5-2). TODOs submit their requirements and requisition data to the centralized system by AUTODIN or AFTO Form 187.

2. AFTO Form 276, Special Requisition for Air Force TO/CPIN (prescribing directive TO 00-5-2). This form is generated and used to ship TOs that are not ordered through ADP.

TM Requisition Status Notification

TRI-SERVICE

Notification to the requester of status whenever a publication is backordered or the order has been canceled or otherwise not processed.

AIR FORCE

When a request for a TO is backordered, canceled, or otherwise not processed, the TODO is normally notified by AFRO Form 215, "Notification". Notice codes used on AFTO Form 215 are contained in TO 00-5-2.

TM Source Data

TRI-SERVICE

TM Source Data is that pool of technical resource documents [e.g., engineering drawings, Logistics Support Analysis (LSA) data, existing TMs, and changes] including paper and digital files used as reference material for producing TMs or TM changes.

TM Specifications and Standards

TRI-SERVICE

Documents describing the style, format, and technical content requirements for TMs.

TM Stock Information

TRI-SERVICE

Identification of the storage location of loose issue and bulk stocks, digital TMs, and other essential stock information for a given TM.

ARMY

St Louis Publication Distribution Center (PDC) Warehouse Control System product identifying locations and quantities of TMs in loose-issue and bulk storage locations and availability of storage locations for new stock. Also contains indicators on whether or not quality control inspections have been completed on stocked publications.

TM System Requirements

TRI-SERVICE

TM System Requirements include TM Need, Perceived Deficiency, Tasking Documents and TM Program Management Requirements.

TMs (from Publishing Facility)

TRI-SERVICE

Copies of bulk TMs, print-on-demand TMs and/or digital TMs that have come from a reproduction facility (contractor or organic) to be stocked and/or distributed.

ARMY

A Material Inspection and Receiving Report (DD Form 250) will accompany TMs produced by a commercial reproduction facility.

TMs (Issued)

TRI-SERVICE

Copies of TMs that are pulled from a storage facility and added to the distribution materials.

ARMY

The USAPPC St Louis PDC stocks and issues all technical publications except MSC authenticated MWOs and DMWRs which are stocked and distributed by the proponent MSC.

Updated TM Index

TRI-SERVICE

TM indexes that have been updated with the latest TM information.

Updated TM Repository Index

TRI-SERVICE

An index containing the latest list of the TMs stored in the repositories.

# **APPENDIX II**

## **Requirements Matrix**



## Appendix II Requirements Matrix

## INTRODUCTION.

During the Department of Defense (DoD) review of this Functional Description (FD), each of the Services validated their requirements for technical manual (TM) automation. A requirements matrix (RM) was developed to provide additional details needed to facilitate understanding of those requirements and to assist in identifying the source(s) of the automation resources needed to satisfy those requirements. The RM descriptive elements, provided herein, consist of:

a. Paraphrased sections of the FD. Each applicable FD section/paragraph was decomposed into its constituent elements to separately and uniquely describe all joint TM system functional requirements. Each item in the RM is directly cross-referenced to the FD section or paragraph from which it was obtained, and each is labeled as a functional, system/technical, location, or data requirement.

b. Objectives extracted from the DoD Corporate Information Management (CIM) documentation that originally supported the Joint Uniform Service Technical Information System (JUSTIS) program. The objectives were included since the CIM documentation had been developed to delineate overall DoD CIM requirements and compliance. Each objective is uniquely labeled and cross-referenced to the appropriate section or sections within the FD.

c. Information provided by the services concerning messages, Data Item Descriptions, forms, Memoranda of Agreement, automated products, master files, transactions, and other information and/or data requirements. These have also been included, cross-referenced, and uniquely labeled.

During a future review, the RM will be updated to reflect the name(s) of Joint, service specific, or Defense Logistics Agency (DLA) systems selected to provide the capabilities described in this FD.

Labeling conventions for RM descriptive elements were developed to make it possible to use the elements in a relational database. Each element is uniquely labeled with a five alpha/numeric characters. One or two prefix characters indicate the primary source document from which that particular RM functional element was obtained and the remainder provide a simple, unique numeric identifier used to cross-reference each element.

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PREFIX	SOURCE	APPLICABLE FD SECTIONS
FD	FD	FD Sections 2.5, 4.1, 4.2, 4.3, 4.5, 5, and 6 (NOT 4.4)
11	FD	FD Section 4.4.1.1
12	FD	FD Section 4.4.1.2
13	FD	FD Section 4.4.1.3
14	FD	FD Section 4.4.1.4
21	FD	FD Section 4.4.2.1
22	FD	FD Section 4.4.2.2
23	FD	FD Section 4.4.2.3
31	FD	FD Section 4.4.3.1
32	FD	FD Section 4.4.3.2
33	FD	FD Section 4.4.3.3
41	FD	FD Section 4.4.4.1
42	FD	FD Section 4.4.4.2
43	FD	FD Section 4.4.4.3
44	FD	FD Section 4.4.4.4
51	FD	FD Section 4.4.5.1
52	FD	FD Section 4.4.5.2
53	FD	FD Section 4.4.5.3
61	FD	FD Section 4.4.6.1
62	FD	FD Section 4.4.6.2
62	FD	FD Section 4.4.6.2
63	FD	FD Section 4.4.6.3
64	FD	FD Section 4.4.6.4
65	FD	FD Section 4.4.6.5
X2	ATOSFD	Section 2
X3	ATOS FD	Section 3
X4	ATOSFD	Section 4

OB CIM White Paper, all objectives

Information/Data Requirements Identifiers [extracted from the JUSTIS Requirements Data Base (JRDB)] are prefixed as follows:

A	AUTODIN All message format transactions
D	Data Item Descriptions
F	Forms
M	Memorandum of Agreement (MOA)
P	Product Control Number (PCN)
S	Master File
T	Transactions
O	Other

## ***Appendix II***

***19 December 1991***

The contents of Appendix II, Requirements Matrix, of the FD are currently being revised to reflect the results of the Joint Requirements Review which concluded on 19 Dec 91. As soon as this appendix is completed, it will be distributed as a change package to the FD.



# **APPENDIX III**

## **Information Engineering Models**

The contents of Appendix III, Information Engineering Models, of the TMFD, are currently being revised to reflect the results of the Joint Requirements Review which concluded on 19 Dec 91. As soon as this appendix is completed, it will be distributed as a change package to the TMFD.